

REMARKS

In response to the RCE and Preliminary Amendment filed on September 6, 2005, a non-Final Office Action was mailed February 7, 2006. In the office action, claims 1-21, 23-31, 33-38, and 78-99 were pending, and claims 15-21, 23-31, 34, 36, 37 and 89 were withdrawn as being directed to a non-elected invention. Claims 1-14, 33, 35, 38, 78-88, and 90-99 stand rejected. In this response, claims 1, 78 and 91 have been amended. Reconsideration of the present application as amended and in view of the remarks that follow is respectfully requested.

Claims 1-14, 33, 35, 38, 78-88 and 90-99 were rejected as being anticipated by U.S. Patent No. 6,607,530 to Carl et al. Carl discloses an implant 160 that extends into vertebral bodies through tunnels formed in the vertebral endplates of the vertebral bodies. As such, the body of the implant extending from the tunnels is sized and configured to be positioned intradiscally or within the disc space between the endplates. Carl discloses, for example, at col. 13, line 64 to col. 14, line 27, that "placement of the implant according to the systems and methods of the present invention is advantageous in that the inserted implant resides completely within the vertebrae and, thus, within the spine, with no protrusions...." Furthermore, central location causes any moment arm to be "more centrally located within the spine as compared to prior devices" and also "the implant is buried to avoid contact with neurovascular structures."

In contrast, amended claim 1 recites "an implant having a first end and an opposite second end, at least a portion of one of said first and second ends structured for positioning in use in a tunnel formed in a first vertebral body; and at least one anchor sized to be embedded within the first vertebral body without protruding from the first vertebral body for attaching said at least a portion of said one of said first and second ends of said implant to the first vertebral body when positioned in the tunnel with said implant including a body having a length and structure to extend from the tunnel extradiscally to a second vertebral body." Carl fails to disclose or suggest an implant with a body having a length and structure as recited in claim 1. Rather, Carl discloses implant 160 that has opposite ends positioned in tunnels formed in the vertebrae and a body between the ends that has a length and structure to extend from the tunnels within the disc space between the vertebrae. Accordingly, length of the body

between the vertebrae is sized to extend intradiscally between the vertebral endplates. Accordingly, Carl cannot anticipate claim 1 and withdrawal of this basis of the rejection of the same is respectfully requested.

Claims 2-14, 33, 35 and 38 depend from claim 1 and were rejected in the Final Office Action. These claims distinguish Carl at least for the reasons claim 1 distinguishes Carl. Additional reasons can be provided to support the independent patentability of these claims. For example, Carl fails to disclose claim 2 which recites "wherein said at least one anchor extends along and threadingly engages said one of said first and second ends of said implant." Fasteners 400 extend transversely to and through the implant 160, and thus do not extend along the implant. Accordingly, allowance of the claims depending from claim 1 is requested.

Amended claim 78 recites "an implant having a first end and an opposite second end, at least one of said first and second ends being positionable in a tunnel formed in a first vertebral body; and at least one anchor engageable to the first vertebral body for attaching said one of said first and second ends of said implant to the first vertebral body, wherein said implant includes a portion between said first and second ends sized to extend from the first vertebral body to a second vertebral body, said one of said first and second ends and said portion of said implant are flexible and angled relative to one another and said portion includes a length sized to extend extradiscally from the first vertebral body toward the second vertebral body with the one of the first and second ends oriented for positioning into the first vertebral body in the tunnel." Carl fails to disclose or suggest an implant with a portion between ends of the implant that is angled relative to one of the ends and includes a length sized to extend extradiscally from the first vertebral body toward the second vertebral body. Rather, the portion of the body of the implant 160 between the ends in the tunnels is sized to extending between adjacent vertebral endplates of the vertebrae within the disc space. Accordingly, Carl cannot anticipate claim 78 and withdrawal of this basis of the rejection of the same is respectfully requested.

Claims 79-88, 90 and 99 depend from claim 78 and were rejected in the Final Office Action. These claims distinguish Carl at least for the reasons claim 78 does. Additional reasons can be provided to support the independent patentability of these claims. For example, Carl discloses that the anchors 400 extend transversely to the ends of the implant,

and cannot anticipate claim 87, which recites "wherein said at least one anchor extends along said one end of said implant." Claim 99 recites "wherein said at least one anchor extends along and threadingly engages said one of said first and second ends of said implant." Carl does not disclose any such engagement relationship between fasteners 400 and implant 160. Accordingly, allowance of the claims depending from claim 78 is also requested.

Amended claim 91 recites "an implant having a flexible, conformable body extending between a first end and an opposite second end, at least a portion of one of said first and second ends including means for conforming to a first vertebral body in a tunnel formed in a first vertebral body; and at least one anchor engageable to the first vertebral body for attaching said one of said first and second ends of said implant to the first vertebral body in the tunnel, said at least one anchor and said one of said first and second ends being configured to engage one another in the tunnel with said means for conforming further having a length extending from the tunnel to conform to the first vertebral body outside the tunnel." As discussed above, Carl does not disclose an implant including means for conforming to a vertebral body. Nor does it disclose any portion of the implant providing a means for conforming that has a length extending from the tunnel to conform to the vertebral body outside the tunnel. Accordingly, there is no disclosure in Carl of an implant as recited in claim 91 and withdrawal of this basis of the rejection is respectfully requested.

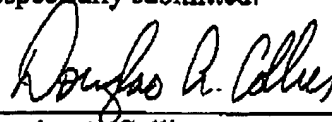
Claims 92-98 depend from claim 91 and allowable at least for the reasons claim 91 is allowable. Additional reasons can be provided to support the independent patentability of these claims. For example, Carl discloses the implant extends through the disc space between vertebrae, and does not disclose claim 97 which recites "wherein said body is structured for positioning on anterior faces of the first vertebral body and the second vertebral body when said first and second ends are positioned in respective ones of said tunnels." Claim 98 depends from claim 91 and recites "wherein said at least one anchor extends along and threadingly engages said one of said first and second ends of said implant." Carl does not disclose any such engagement relationship between fasteners 400 and implant 160. Accordingly, allowance of the claims depending from claim 91 is also requested.

In view of the above amendments and remarks, it is believed that claims 1-21, 23-31, 33-38 and 78-99 are in condition for allowance, and a Notice of Allowance is hereby

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solicited. The Examiner is welcome to contact the undersigned to resolve any outstanding issues with regard to the present application.

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